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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/626,510	07/24/2003	Raj P. Ranganathan	GP-302991	1970
7590 03/01/2005			EXAMINER	
CARY W. BROOKS			KAMEN, NOAH P	
General Motors Corporation Legal Staff, Mail Code 482-C23-B21			ART UNIT	PAPER NUMBER
P.O. Box 300 Detroit, MI 48265-3000			3747	
			DATE MAILED: 03/01/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)				
	10/626,510	RANGANATHAN ET AL.				
Office Action Summary	Examiner	Art Unit				
	Noah Kamen	3747				
The MAILING DATE of this communication app Period for Reply	ears on the cover sheet with the c	orrespondence address				
A SHORTENED STATUTORY PERIOD FOR REPLY THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period w - Failure to reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be timed within the statutory minimum of thirty (30) days will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONEI	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1) Responsive to communication(s) filed on						
2a) This action is <b>FINAL</b> . 2b) ⊠ This	action is non-final.					
,,,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
<ul> <li>4) ☐ Claim(s) 1-8 is/are pending in the application.</li> <li>4a) Of the above claim(s) is/are withdraw</li> <li>5) ☐ Claim(s) 8 is/are allowed.</li> <li>6) ☐ Claim(s) 1-7 is/are rejected.</li> <li>7) ☐ Claim(s) is/are objected to.</li> <li>8) ☐ Claim(s) are subject to restriction and/or</li> </ul>						
Application Papers						
9) The specification is objected to by the Examine	r.					
10)☐ The drawing(s) filed on is/are: a)☐ acce	0)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.					
Applicant may not request that any objection to the	= ' '					
Replacement drawing sheet(s) including the correct 11) The oath or declaration is objected to by the Ex						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign a) All b) Some * c) None of:  1. Certified copies of the priority documents 2. Certified copies of the priority documents 3. Copies of the certified copies of the priority documents application from the International Bureau * See the attached detailed Office action for a list	s have been received. s have been received in Applicati rity documents have been receive u (PCT Rule 17.2(a)).	on No ed in this National Stage				
Attachment(s)  1) M Notice of References Cited (PTO-892)	4) 🔲 Interview Summary	(PTO-413)				
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Da	ate				
3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>5/13/04</u> .	5)  Notice of Informal P 6)  Other:	ratent Application (PTO-152)				

#### **DETAILED ACTION**

### Drawings

The IDS lists "view A" as being prior art and the applicant has submitted this view as one of the figures in the disclosure. The applicant is directed to relable this figure as being on sheet number 3 and the figure as "figure 6". Under the figure include the title "Prior Art".

# Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

Claims 1 and 5-7 are rejected under 35 U.S.C. 102(a) as being anticipated by McCarthy, Jr. et al (6698924).

Figures 1-3 show a venturi that would inherently suppress cavitations because it has all of the recited structure including a converging nozzle at D9, a diffuser pipe at D12, and a head pipe at D15. in regard to claims 6 and 7, the diffuser pipe has a range of cross-sections that encompass from 2 to 3.5 times larger than that of the nozzle outlet. All recitations regarding pumps and coolant systems are merely statements of intended use.

In claim 6, the use of "about" in conjunction with a range should be avoided because the actual range is not clearly set forth.

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Art Unit: 3747

Claims 1-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCarthy, Jr. et al. While the venturi is seen to be of a single piece, to make anything out of a plurality of pieces where there is an advantage in cost, manufacturing, maintenance, would have been obvious to one of ordinary skill in the art as a matter of engineering practice (See In re Dulberg 289 F.2d 522, 523). In regard to claims 3 and 4, while the device McCarthy, Jr. et al use threaded ports for securing pipes, the use of flanges for coupling conduits is notoriously well known.

Note, there is no antecedent basis for "the aspirator" in claim 3

### Allowable Subject Matter

Claim 8 is allowed.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Noah Kamen whose telephone number is 571 272 4845. The examiner can normally be reached on M-Th 6:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on 571 272 4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Noah Kamen
Primary Examiner
Art Unit 3747